From the INTERNATIONAL SEARCHING AUTHORITY

T.

PCT



No.602, Fuji Bldg., 2-3, WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

Chiyoda-ku, Tokyo 100-0005

JAPAN

MASAO OKABE

(PCT Rule 43bis.1)

Date of mailing (day/month/year)

FOR FURTHER ACTION

11. 5. 2004

Applicant's or agent's file reference

CFO17855WO

Priority date (day/month/year)

See paragraph 2 below

International application No. PCT/JP2004/000964

International filing date (day/month/year)

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30.0

30.01.2004

31.01.2003

International Patent Classification (IPC) or both national classification and IPC

Int.Cl⁷ H01L41/09,41/187,41/24,B41J2/045,2/055

Applicant

CANON KABUSHIKI KAISHA

1.	1. This opinion contains indications relating to the following items:							
	•	Box No. I	Basis of the opinion					
		Box No. II	Priority					
		Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
		Box No. IV	Lack of unity of invention					
	V	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
		Box No. VI	Certain documents cited					
		Box No. VII	Certain defects in the international application					
		Box No. VIII	Certain observations on the international application					
2.	FURTHER ACTION							
	If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.							
	If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.							
	For further options, see Form PCT/ISA/220.							
3.	For further details, see notes to Form PCT/ISA/220.							

Name and mailing address of the ISA/JP

Authorized officer

4M 3238

Japan Patent Office

AKIRA SHOYAMA

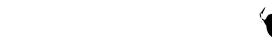
3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

Telephone No. +81-3-3581-1101 Ext. 3462





Вох	No. I	Basis of the opinion	
1.	which it	was filed, unless otherwise is opinion has been establis	inion has been established on the basis of the international application in the language in indicated under this item. hed on the basis of a translation from the original language into the following language is the language of a translation furnished for the purposes of international search (under
2.	With reg	ard to any nucleotide and/nvention, this opinion has be	or amino acid sequence disclosed in the international application and necessary to the sen established on the basis of:
	a. type o	f material	
		a sequence listing	•
		table(s) related to the se	quence listing
	b. forma	of material	
		in written format	·
•		in computer readable forn	i
	c. time o		ernational application in computer readable form.
		furnished subsequently to	this Authority for the purposes of search.
3.	file	d or furnished, the required	ore than one version or copy of a sequence listing and/or table relating thereto has been statements that the information in the subsequent or additional copies is identical to that sees not go beyond the application as filed, as appropriate, were furnished.
4.	Addition	al comments:	
			•
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/JP2004/ 000964

	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
atement					
Novelty (N)	Claims	2-16	YES		
	Claims	1	NO		
Inventive step (IS)		2-12	YES		
	Claims	1,13-16	NO		
Industrial applicability (IA)	Claims	1-16	YES		
	Claims		NO NO		
	citations and explana atement Novelty (N) Inventive step (IS)	citations and explanations supportatement Novelty (N) Claims Claims Inventive step (IS) Claims Claims Claims Claims	citations and explanations supporting such statement atement Novelty (N) Claims Claims 1 Inventive step (IS) Claims Claims 2-16 1 1 Inventive step (IS) Claims 1-16		

2. Citations and explanations

D1 JP 10-251093 A(KABUSHIKI KAISHA TOSHIBA)1998.09.22

D2 WO 97/03472 A1(ULLAKKO)1997.01.30

D3 US 6387476 B1(SONY CORPORATION)2002.05.14

D4 US 5936329 A(NGK INSULATORS,LTD.)1999.08.10

Claim 1

The subject matters of claim 1 do not appear to be novel with respect to D1. D1 shows that the piezoelectric material has a twin crystal.(see [0003]-[0006])

Claims 2-12

The subject matters of claims 2-12, details of the twin crystal, are neither disclosed in the closest prior documents D1-D4 cited in the ISR nor obvious to a person skilled in the art.

Therefore, the suject matters of claims 2-12 appear to be novel and to involve an inventive step.

Claims 13-16

The subject matters of claims 13-16 do not appear to involve an inventive step in view of D1.

The subject matters of claims 13-16 are well-known arts in the piezoelectric device field.